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10/620,675	07/15/2003	David Punsalan	200210251-1	9644

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HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER
WANG, EUGENIA

ART UNIT	PAPER NUMBER
1795	

NOTIFICATION DATE	DELIVERY MODE
02/10/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM
mkraft@hp.com
ipa.mail@hp.com

Office Action Summary	Application No.	Applicant(s)	
	10/620,675	PUNSALAN ET AL.	
	Examiner	Art Unit	
	EUGENIA WANG	1795	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18 and 55-67* is/are pending in the application.

4a) Of the above claim(s) *66 and 67* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18 and 55-65* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Appeal Brief

1. The decision on the Appeal made on February 2, 2008 has been noted. The Examiner's previous position has been reversed. However, the application is not yet in condition for allowance.

2. It is noted that claims 1-18 and 55-67 are pending with claims 66-67 withdrawn as being drawn to an unelected invention.

Specification

3. The disclosure is objected to because of the following informalities: a typographical error on the last line of p6, wherein Examiner submits the word "Ex mplary" should be 'Exemplary'.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 12 and 13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 12 and 13 recites the limitation "said porous substrate" in line 2 of each claim. There is insufficient antecedent basis for this limitation in the claim. It is noted that claims 1, 10, and 11 from which claims 12 and 13 depend on only claim a substrate, not a porous substrate. Accordingly, there is no support for "said porous

substrate." In light of this issue, the following interpretation on claims 12 and 13 are taken – the substrate is not porous (falling in line with the language of claims 1, 10, and 11).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 10-13, 55-59, and 61-65 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 01/94668 (Furuya). (It is noted that US 2003/1341787, is being relied on as the translation for the WO document, as both correspond to the same PCT (PCT/JP01/04693)).

As to claims 1 and 57, Furuya teaches a method of manufacturing a polymer electrolyte (para 0193). The method includes having a stainless foil (substrate) in a Nafion-including, polymeric solution and depositing the polymer via electrophoresis (electrodepositing method) to form the electrolyte on the stainless foil (substrate) (para 0041; para 0110-0115; example 9: para 0193-0195 and 0198-200). It is noted that the process includes applying charge to an anode (negatively-charged electrode) and a cathode (positively-charged electrode) (para 0041), wherein a stainless foil (substrate) is the anode and a nickel foam is the cathode (para 0194-0195) (as applied to claim 1). Furthermore, it is noted at least an electrical coupling inherently exists between the

anode and cathode in order to obtain the deposition as taught by Furuya (para 0194-0195) (as applied to claim 1).

Where applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 U.S.C. 102 and 103, expressed as a 102/103 rejection.

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).

"In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990)

In the case of the instant application the basis for expectation of inherency is based in the scientific ground of the electro-deposition taught by Furuya. Since electro-deposition results when both the anode and the cathode are placed in the same polymeric solution, wherein when a charge is applied to both electrodes, it displays that the electrodes must be electrically coupled to provide the charge differential as taught (para 0194-0195).

The Examiner invites applicant to provide that the prior art products do not necessarily or inherently possess the characteristics of his [or her] claimed product.

Whether the rejection is based on inherency' under 35 U.S.C. 102, on prima facie obviousness' under 35 U.S.C. 103, jointly or alternatively, the burden of proof is the same...[footnote omitted]." The burden of proof is similar to that required with respect to product-by-process claims. In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980) (quoting In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977)).

As to claims 10 and 61, Furuya teaches that the method comprises putting the nickel cathode (positively charged electrode) and stainless foil anode (substrate) into a vessel that is filled with an electrolyte solution with polymeric particles (para 0194-0195). A voltage is charged between the anode and cathode (constituting a generating of electric field), which causes the polymeric particles to develop a charge and deposit itself on the porous substrate (thus accelerating such deposition) (para 194-0195).

As to claims 11 and 62, Furuya teaches that the polymer electrolyte solution contains Nafion (para 0195). (It is noted that Nafion is inherently a perfluorsulfonate ionomer particle. The basis of inherency is the fact that this is the same material embodied by Applicant. See para 0023 in the Specification. Therefore, Nafion is a perfluorosulfonate ionomer. See the rejection to claims 1 and 57 for the Office's policy on inherency.)

As to claims 12, and 63, Furuya teaches that the Nafion (perfluorosulfonate ionomer) electrolyte is deposited on the anode (substrate) using electrophoresis (para 0041; para 0195; para 0197-200). Such a process is an electrolytic deposition, as the electrolyte is being deposited (as applied to claim 12).

As to claim 13, Furuya teaches that the Nafion (perfluorosulfonate ionomer) electrolyte is deposited on the stainless foil anode (substrate), wherein a film was formed on the stainless foil (para 0041; para 0195). (Since it is formed as a layer on the foil, it constitutes a formation on an outer surface.)

As to claims 55 and 58, Furuya teaches of a polymeric (Nafion) electrolyte, as made by its disclosed methods of electro-deposition (as disclosed within the rejection to claims 1 and 57 -- see also para 0041; para 0110-0115; example 9: para 0193-0195 and 0198-200).

As to claims 56 and 59, Furuya teaches of a polymeric (Nafion) electrolyte, as made by its disclosed methods of electro-deposition (as disclosed within the rejection to claims 1 and 57 -- see also para 0041; para 0110-0115; example 9: para 0193-0195 and 0198-200). It is further noted that a reaction layer (part of one electrode) is put on one side of the electro-deposited electrolyte, wherein two of these structures are put together (para 0200). It is stated that the final product is a fuel cell with a gas diffusion layers on either side of the composite sheet (thus completing the electrode structure) to make an operating fuel cell (para 0201). (Note: Although it is not specified in what manner the two electrolyte/reaction layer films are put together. For operation of a fuel cell, the final structure must have the electrolyte surrounded by the electrodes. Any other structure would render a fuel cell inoperable, as the electrochemical reaction would not be able to be carried out. The necessity of such a structure is exemplified in para 0217 and para 0219.)

As to claims 64 and 65, Furuya teaches that the stainless foils (substrates) are removed from the reaction layer/electrolyte film (which has the Nafion (perfluorosulfonate ionmer particles) (para 0200). Accordingly, the electrolyte film (and thus the perfluorosulfonate ionmer particles) is removed from an outer surface of the substrate.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 2, 4-8, and 60 rejected under 35 U.S.C. 103(a) as being unpatentable over Furuya.

The teachings of Furuya are set forth above and are incorporated herein.

As to claims 2 and 60, Furuya teaches of a stainless foil. Such a stainless foil is inherently (electrically) conductive, wherein the basis of inherency lies in the fact that conductivity is necessary to provide the charge deferential needed for the electro-deposition (see para 0194-0195). (See the rejection to claims 1 and 57 as to the Office's policy on inherency.) Further proof of the electrical conductivity lies in the fact that it is specified by Furuya that a portion (the lead) of the stainless foil is insulated (indicating that the rest of the foil is conductive).

Furuya's example 9 (as relied upon above, in cited paragraphs 0194-0195) does not specifically teach that the stainless foil anode is porous. However, Furuya teaches that the polymeric electrolyte can be deposited into a perforated (porous) plate, wherein the base in which the polymeric electrolyte is deposited on is conductive (para 0041 and para 0044). Accordingly, Furuya exemplifies that a porous substrate (perforated plate) and nonporous substrate (anode) both function as substrates that work with electro-deposition. Therefore it would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to make the stainless foil (substrate) of Furuya's example 9 porous, as the substitution for one substrate (porous) for another

(nonporous) would have yielded the predictable result of acting as a same manner – being a base for electro-deposition.

As to claim 4, Furuya's anode (stainless foil/substrate) and cathode (nickel foam/charged electrode) are inherently electrically coupled. The basis for expectation of inherency is based in the scientific ground of the electro-deposition taught by Furuya. Since electro-deposition results when both the anode and the cathode are placed in the same polymeric solution, wherein when a charge is applied to both electrodes, it displays that the electrodes must be electrically coupled to provide the charge differential as taught (para 0194-0195). (See the rejection to claims 1 and 57 as to the Office's policy on inherency.)

As to claim 5, Furuya teaches that the method comprises putting the nickel cathode (positively charged electrode) and stainless foil anode (substrate) into a vessel that is filled with an electrolyte solution with polymeric particles (para 0194-0195). A voltage is charged between the anode and cathode (constituting a generating of electric field), which causes the polymeric particles to develop a charge and deposit itself on the porous substrate (thus accelerating such deposition) (para 194-0195).

As to claim 6, Furuya teaches that the polymer electrolyte solution contains Nafion (para 0195). (It is noted that Nafion is inherently a perfluorsulfonate ionomer particle. The basis of inherency is the fact that this is the same material embodied by Applicant. See para 0023 in the Specification. Therefore, Nafion is a perfluorosulfonate ionomer. See the rejection to claims 1 and 57 for the Office's policy on inherency.)

As to claim 7, Furuya teaches that the Nafion (perfluorosulfonate ionomer) electrolyte is deposited on the anode (substrate) using electrophoresis (para 0041; para 0195; para 0197-200). Such a process is an electrolytic deposition, as the electrolyte is being deposited (as applied to claim 12).

As to claim 8, Furuya teaches that the stainless foils (substrates) are removed from the reaction layer/electrolyte film (which has the Nafion (perfluorosulfonate ionmer particles) (para 0200). Accordingly, the electrolyte film (and thus the perfluorosulfonate ionmer particles) is removed from an outer surface of the substrate.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Furuya, as applied to claims 1 and 2, in view of US 4952293 (Sypula et al.).

As to claim 3, it is first noted that Furuya does teach using a nickel cathode and a stainless foil anode (conductive, porous substrate) (para 0194-0195). However, Furuya does not specifically state that the conductive, porous substrate is specifically stainless steel.

Sypula et al. teaches of electrodepositing polymers (abs). More specifically, the apparatus used includes two electrodes one of which is nickel (much like the cathode of Furuya) and the other which is exemplified as stainless steel (col. 25, lines 61-67). It would have been obvious to one having ordinary skill in the art at the time the invention was made to use stainless steel (as taught by Sypula et al.) as the stainless foil in Furuya's invention, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin,* 125 USPQ 416. Furthermore, it is noted

that the use of stainless steel as the anode in the invention of Furuya would have yielded the predictable result of operating in the same manner. This is clearly shown by Sypula et al., a nickel electrode in conjunction with a stainless steel electrode is shown to be known to work together in such a manner to electro-deposit polymeric material (abs; col. 25, lines 61-67). Furthermore, the mere teaching of stainless steel as used in as a polymeric electro-deposition electrode would obviate the use of such material, as it is noted Furuya embodies stainless foils. Therefore, one of ordinary skill in the art would expect a stainless steel (as taught by Sypula et al.) anode to operate in the same manner as a stainless foil (as set forth by Furuya), as Sypula et al. clearly shows that stainless steel is a material that can be used as an electrode in an electro-deposition process. Therefore, it would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to use stainless steel as the anode in the invention of Furuya, as it would have yielded the predictable result of operating in the same manner (i.e. as an electrode in a polymeric electro-deposition process) (since Sypula et al. sets forth a similar usage of that material).

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Furuya, as applied to claims 1-8, in view of US 2001/0014409 (Cohen).

As to claim 9, it is noted that Furuya teaches that the stainless foils (substrates) are removed from the reaction layer/electrolyte film (which has the Nafion (perfluorosulfonate ionmer particles) (para 0200). Accordingly, the electrolyte film (and thus the perfluorosulfonate ionmer particles) is removed. However, Furuya does not teach that the removal of the particles is done with a blade.

Cohen teaches of a process involving an electrochemical deposition (para 0002). (It is noted that although the type of electro-deposition is different between Furuya (electrophoresis) and Cohen (electroplating), such methods are similar as both are electro-deposition methods which can be used to deposit polymeric layers on a substrate. See para 0195 of Furuya and para 0017 of Cohen. Accordingly, Cohen and Furuya are seen to be similar and thus combinable.) Furthermore, Cohen teaches that a dull blade may be used to remove the electroplated article from the substrate (para 0056). Accordingly, one of ordinary skill at the time in the art would have found that using the method of removal of an electrodeposited layer by knife (as taught by Cohen) when applied to Furuya et al. would have had yielded in the predictable result of removing the electrodeposited layer from the substrate it was deposited on, as such a layer removal is used successfully on product produced by a similar manner. Therefore it would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to remove the electrolyte layer of Furuya et al. from the substrate it was deposited on via a knife (as taught by Cohen), as such a method would have yielded the predictable result of removal of an electro-deposited layer from a substrate it was deposited on.

9. Claims 1 and 14-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5281327 (Honda et al.) in view of Furuya.

As to claim 1, Honda et al. teach of electro-depositing polymeric materials (abs; col. 2, lines 48-67; figs. 1-2). There is a gasket [2] (substrate) mechanically coupled to

a working (charged) electrode [2] (abs; fig. 1). As seen in fig. 2, the conductive portion of the polymer [6] is deposited on a portion of the gasket [2] (substrate).

Honda does not specifically teach that the polymer is electrolytic.

However, Furuya teach of a similar deposition (electro-depositing a polymeric material). (See para 0041; para 0110-0115; example 9: para 0193-0195 and 0198-200.) Specifically, Furuya's electro-deposition is with respect to a polymer electrolyte (para 0193-0195). Accordingly, one of ordinary skill in the art would have found it obvious to deposit the polymeric material (electrolyte) of Furuya using the system of Honda et al., as the substitution of the material taught by Furuya in the system of Honda et al. would have yielded the predictable result of forming a polymeric layer. Therefore it would have been obvious to one having ordinary skill in the art at the time the claimed invention was made to use the system of Honda et al. to electro-deposit the material of Furuya (in the manner disclosed), as the deposition of the material, as taught by Furuya is similar to the process used by Honda et al., and thus the combination would yield the predictable result of forming a polymeric layer.

As to claim 14, Honda et al's gasket [2] (substrate), as seen in figs. 1 and 2, is inherently non-conductive (electrically). The basis for inherency is that such a quality is that it necessary to prevent short-circuiting between the electrodes [3, 3'] for the function of applying the potential difference. (Please see the rejection of claims 1 and 57 for the Office's policy on inherent characteristics.) Furthermore it is noted that all materials inherently have a certain degree of porosity (no matter how big or small), and thus the gasket [2] (substrate) is taken to be porous barring specificity as to what constitutes

"porous." Office personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure. *In re Morris*, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023, 1027-28 (Fed. Cir. 1997). Also, limitations appearing in the specification but not recited in the claim are not read into the claim. See *In re Zletz*, 893F.2d 319, 321-22,13 USPQ2d, 1320, 1322 (Fed. Cir. 1989).

As to claim 15, Honda et al.'s gasket [2] is directly touching the surface of the electrode [3], wherein the electrodes [3, 3'] and frame plates [5, 5'] provide the mechanical coupling (figs. 1-2).

As to claim 16, the combination of Honda et al. and Furuya obviate the claimed feature. It is noted that depositing Furuya's material using Honda et al.'s structure has been obviated in the rejection to claim 14. As seen in fig. 1 of Honda et al., the gasket [2] (substrate) and electrode [3] are deposited in a solution [4] (as it is taken that anything within the outer walls of the system is "in" the solution, barring specification otherwise). A direct current is applied across the cell to provide the deposition of the polymer (creating the electric field and accelerating charged particles to the porous substrate, as some of the polymeric material is deposited on the defined substrate) (abs; col. 2, lines 48-67; figs. 1-2). Furthermore, Furuya teaches a method with similar steps - putting a cathode (positively charged electrode) and an anode (negatively charged electrode) into a vessel that is filled with an electrolyte solution with polymeric particle and applying current which causes the polymeric particles to develop a charge and deposit itself (creating the electric field and accelerating charged particles) (para

0041). Accordingly, the processes taught by Honda et al. and Furuya are substantially similar.

As to claim 17, the combination of Honda et al. and Furuya obviate the claimed feature. It is noted that depositing Furuya's material using Honda et al.'s structure has been obviated in the rejection to claim 14. The material taught by Furuya contains Nafion (para 0195). (It is noted that Nafion is inherently a perfluorsulfonate ionomer particle. The basis of inherency is the fact that this is the same material embodied by Applicant. See para 0023 in the Specification. Therefore, Nafion is a perfluorosulfonate ionomer. See the rejection to claims 1 and 57 for the Office's policy on inherency.)

As to claim 18, the combination of Honda et al. and Furuya obviate the claimed feature. It is noted that depositing Furuya's material using Honda et al.'s structure has been obviated in the rejection to claim 14. The deposition of Furuya's material (Nafion, a perfluorosulfonate ionmer) in the system of Honda et al, (with gasket [2] (substrate)) would constitute a deposition via electrophoresis, as Furuya states that the process applied for such deposition is electrophoresis (para 0041; para 0195; para 0197-200).

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422

F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 1, 10-12 55, 57, 58, and 61-63 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 13-15 18, 62, and 63 of copending Application No. 10/705486 either (a) as evidence by or (b) in view of US 2002/0014412 (December).

The pertinent claims of copending Application No. 10/705486 are listed below:

13. (currently amended) A method of forming an electrolyte, comprising:

removably coupling a perimeter support to a temporary substrate;

electrodepositing a structural material and an electrolyte material to form an electrolyte composite film on said temporary substrate such that a perimeter of said film is supported by said perimeter support; and

~~The method of claim 1, further comprising~~ electrodepositing a layer of ions on said electrolyte composite film.

14. (original) The method of claim 13, wherein said layer of ions comprises at least one of perfluorosulfonate ionomers or sulfonate polyetherketones.

15. (original) The method of claim 13, wherein said electrodepositing of said layer of ions comprises electrolytic deposition.

18. (original) The method of claim 13, wherein electrodepositing said electrolyte composite film comprises electrophoretic deposition and electrodepositing said layer of ions comprises electrolytic deposition.

62. (currently amended) A method of forming a fuel cell electrolyte, comprising:

disposing a temporary substrate in a solution already comprising polymer units;

electrodepositing said polymer units on said temporary substrate so as to form said fuel cell electrolyte on said temporary substrate; and

~~The method of claim 57, further comprising~~ electrodepositing a layer of ions on said electrolyte composite film, wherein said layer of ions is thinner than said fuel cell electrolyte.

63. (previously presented)The method of claim 62, wherein said layer of ions comprises at least one of perfluorosulfonate ionomers or sulfonate polyetherketones.

Copending claim 62 reads on currently pending claims 1, 10, 55, 57, 58, and 61. With respect to currently pending claims 1 and 57, copending claim 62 recites a method of manufacturing an electrolyte by electrodepositing polymer units onto a substrate. The practice of such a method would yield the product (as applied to currently pending claims 55 and 58).

The differences between copending claim 62 and currently pending claims 1, 10, 55, 58, and 61 is that there is no recitation that a charged electrode coupled to the substrate is used.

However, December is relied upon to either (a) show that the process of electro-deposition inherently requires the use of a charged electrode coupled to the substrate, or alternately (b) that the use of a charged electrode coupled to the substrate would at the very least be obvious.

December teaches that electro-deposition of a polymer includes having a substrate submerged in a polymeric solution, wherein a charge potential between the substrate and a pole of the opposite charge, usually a stainless steel electrode (which provides at least some coupling between the charged electrode and substrate, barring specification as to what constitutes coupling) (para 0003).

With respect to (a), it can be taken that the process of electro-deposition of a polymer would inherently follow such steps.

Where applicant claims a composition in terms of a function, property or characteristic and the composition of the prior art is the same as that of the claim but the function is not explicitly disclosed by the reference, the examiner may make a rejection under both 35 U.S.C. 102 and 103, expressed as a 102/103 rejection.

The fact that a certain result or characteristic may occur or be present in the prior art is not sufficient to establish the inherency of that result or characteristic. In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).

"In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990)

In the case of the instant application the basis for expectation of inherency is that December, relied upon as an evidentiary piece, clearly sets forth what is needed for performing polymeric electro-deposition (para 0003). Accordingly, such steps, although not explicitly stated in the copending claims would be inherent to perform such electro-deposition.

The Examiner invites applicant to provide that the prior art products do not necessarily or inherently possess the characteristics of his [or her] claimed product.

Whether the rejection is based on inherency' under 35 U.S.C. 102, on prima facie obviousness' under 35 U.S.C. 103, jointly or alternatively, the burden of proof is the same...[footnote omitted]." The burden of proof is similar to that required with respect to product-by-process claims. In re Fitzgerald, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980) (quoting In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977)).

Alternately, with respect to (b) (if it is shown that electro-deposition does not necessarily require the use of a charged electrode), it would be obvious. The use of a charged electrode to provide the electric field required for electro-deposition would have yielded the predictable result of providing a method of electrodepositing. Therefore it would have been obvious to one having ordinary skill in the art at the time the claimed

invention was made to use a charged electrode in combination with the polymer and substrate (as listed in the copending claims), as the use of such a charged electrode would have resulted in the predictable of electro-deposition of the polymer.

It is noted that December's method of para 003 is applicable to currently pending claims 1, 10, 55, 57, 58, and 61 (specifically that December's method sets forth that electro-deposition includes the steps of currently pending claims 10 and 61).

Copending claim 63 reads on currently pending claims 11 and 62.

Copending claims 13, 14, 15, and 62 read on currently pending claim 12.

Copending claims 13, 14, 18, and 62 read on currently pending claim 63.

This is a provisional obviousness-type double patenting rejection.

** It is noted that the copending has not yet been issued. If the copending is issued in the interim, the corresponding (non-provisional) double patenting would apply.

Conclusion

12. Prosecution on this application has been reopened after a decision of the BPAI reversing the examiner with the approval of the TC Director's designee.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eugenia Wang whose telephone number is 571-272-4942. The examiner can normally be reached on 7 - 4:30 Mon. - Thurs., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/E. W./
Examiner, Art Unit 1795

/PATRICK RYAN/
Supervisory Patent Examiner, Art Unit 1795

/Gregory L Mills/
Supervisory Patent Examiner, Art Unit 1700
Reopening of prosecution after BPAI decision approved